Met Office helps the Insurance Industry assess risk

4 November 2014 - When you think of last winter, flooding probably comes to mind, however it was actually wind that caused the greater insured loss across Europe.

Now the Met Office is helping the insurance industry understand its windstorm risk. The Insurance and Capital Markets Applied Science team at the Met Office has developed a suite of European windstorm products and services aimed at supporting reinsurers, insurers and brokers this coming winter and beyond.

As well as hazard maps designed to support risk pricing at a local level, the product suite includes a catalogue of historical windstorms for portfolio management and capital reserving and alerts and impact analysis of incoming storm events for insurance operations.

When a major Atlantic storm reaches land, policyholders have a higher than ever expectation of help. Insurers must deploy staff on the ground, boost call centre staff numbers and call forward capital for early settlement of claims. To do this they need early alerts with confidence levels, and a regularly updated view of the storm size, track and severity.

The Euro Windstorm Event Response service not only gives a daily modelled view of how the storm will evolve, it will match the predicted footprint to the closest historical storm so that the insurer can compare previous losses to predict the financial impact. The team will also deliver a contextual plot against return periods, giving a quick view of the significance of a storm.

Insurers also need to model risk over long periods and large domains, for which they use complex catastrophe models. Independent expertise on a hazard provides a valuable means of validating model conclusions for compliance purposes. So the Met Office is releasing a catalogue of 6000 historical storms for Europe, modelled to an industry leading resolution of 4km, giving expert insight into the probability, location and severity of events that could affect insured portfolios.

For insight into extreme events that could happen, but have not happened in observed history, the Applied Science team is currently developing an 'event set' of synthetic storms, modelling tens of thousands of alternative and potentially more extreme outcomes of 'seed' storms that have occurred.

Paul Maisey, Met Office Head of Science for Insurance and Capital Markets said: "Insurers are always under scrutiny to ensure that they can meet their obligations after extreme natural events. As an independent scientific organisation we can bring some real insight into the hazard component of the risk calculation. These are early days for us in this industry but the signs are that the team's Euro Windstorm services will be well received."

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